ANNOTATED CHECKLIST OF THE VASCULAR FLORA OF THE JACK GORE BAYGALL AND NECHES BOTTOM UNITS OF THE BIG THICKET NATIONAL PRESERVE, TYLER, JASPER, AND HARDIN COUNTIES, TEXAS

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ABSTRACT

An annotated, vouchered checklist is provided of the vascular plant taxa of the Jack Gore Baygall and Neches Bottom Units of the Big Thicket National Preserve in Tyler, Jasper, and Hardin counties, Texas. Together they total 5,379 hectares. Documented for the units are 139 taxa (but only 734 species due to multiple varieties in some native species), of which 89 taxa (12.1%) are exotics.

RESUMEN

Se presenta una lista anotada, incluyendo colecciones botánicos, de plantas vasculares en las unidades de Jack Gore Baygall y de Neches Bottom del Big Thicket National Preserve, en los condados de Tyler, Jasper y Hardin en Texas. Juntos estos condados suman 5.379 hectáreas. Se documentan 739 taxones en las unidades (de estas solamente hay 734 especies, esto debido a las múltiples variedades de algunas especies nativas) de los cuales 89 taxones (12,1%) son exôticas.

INTRODUCTION

This is the 8th part of an inventory, based on available voucher specimens, of the vascular flora of the Big Thicket National Preserve in southeastern Texas. In previous papers, we provided annotated checklists of the Hickory Creek, Turkey Creek, Big Sandy Creek, Lance Rosier, Beech Creek, Loblolly, and Menard Creek Units (MacRoberts et al. 2002; Brown et al. 2005, 2006a, 2006b, 2008a, 2008b, 2009). In this paper, we provide an annotated checklist of the Jack Gore Baygall and Neches Bottom Units since they are continuous and occupy the same habitat.

SITE AND METHODS

The Big Thicket National Reserve is located in the West Gulf Coastal Plain in southeastern Texas (see Diggs et al. 2006) for literature and description). It consists of units ranging from 222 to 10,000 hectares and of about 40,100 hectares scattered over seven counties (Fig. 1). The Jack Gore Baygall and Neches Bottom Units straddle the Neches River in Tyler, Jasper, and Hardin counties and total 5,379 hectares (Peacock 1994). Latitude extends from 30°47.933'N at the B.A. Steinhagen Lake dam at Town Bluff south to 30°15.055'N at Juncture with the Beaumont Unit. Longitude extends from 94°10.723' at Highway 2937 in Hardin County east to 94°03.660 at Sally Withers Lake in Jasper County. These units are located on Deweyville, Lissie, and modern alluvial soil series (Deshotels 1978; Aranow 1981). The Jack Gore Baygall and Neches Bottom are among the most diverse units in the Preserve in that they contain upper-slope, mid-slope, and lower-slope forests as well as floodplain hardwood forest, wetland baygall, and cypress-tupelo swamp (Harcombe & Marks 1979; Marks & Harcombe 1981).

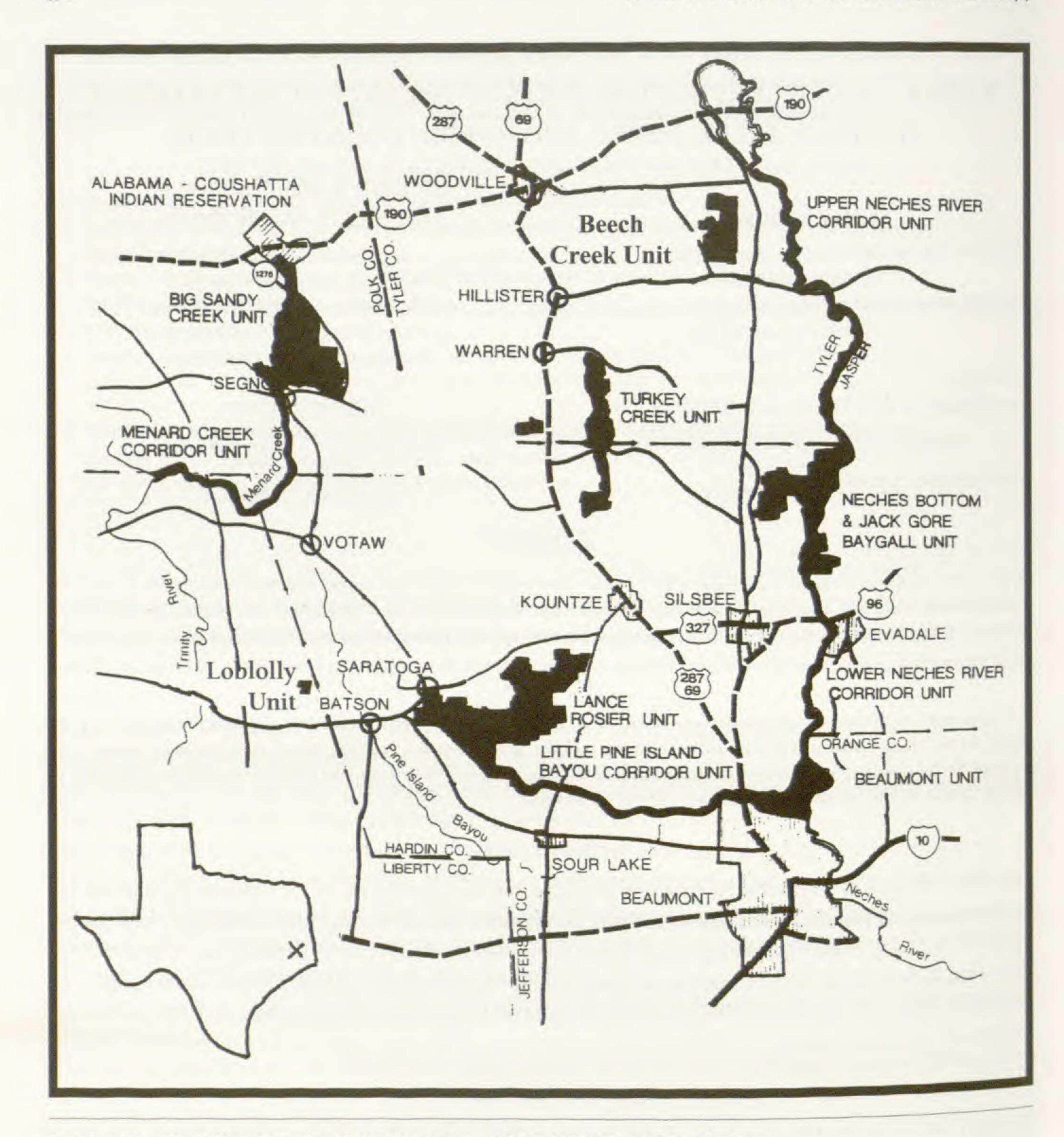


Fig. 1. Location of the Jack Gore Baygall and Neches Bottom units of the Big Thicket National Preserve, Texas.

Elevation ranges from a high of 33 meters in the small portion of the Jack Gore Baygall Unit adjacent to Highway 2937 to 3 meters at the junction of the Neches River Corridor Unit with the Beaumont Unit.

Like all units of the Big Thicket Biological Preserve, excluding the recent floristic inventories of the above cited units, the Jack Gore Baygall and Neches Bottom units had not previously been the subject of a detailed floristic inventory.

Because our purpose is to produce a list of taxa know to occur in the Jack Gore Baygall and Neches Bottom units, a vouchered specimen was considered to be the only evidence acceptable for inclusion in the list. In all, 1304 + herbarium specimens form the data for this report. Larry Brown annotated all specimens.

Larry Brown collected 716 specimens during 25 field days beginning in June 2008 and ending in November 2009. Stanley Jones collected 338 specimens in the mid 2000s. Geraldine Watson collected 51

specimens over several years in the late 1970s and early 1980s. The MacRoberts collected 31specimens. Sandra Elsik and Warren Pruess together collected 105 specimens and Warren Pruess singly collected 57 specimens. Collection totals for the few others are 12. All collectors and collection numbers are designated by appropriate abbreviations below.

In most cases, the current family nomenclature follows Chester et al. (2009) and A.S. Weakley (2007). Species nomenclature for the most part follows Jones et al. (1997), Kartesz (1999), and Diggs et al. (2006). In cases of multiple collections, no more than four are listed for each taxon.

RESULTS

The following is an annotated list of the Jack Gore Baygall Unit and Neches Bottom Units taxa. Abbreviations used are given below:

CL = C. Liu. His one collection is at TAES.

PH = Paul Harcombe. His one collection is at TAES.

PR = Paul Roling. His specimens are at TAES.

GW = Geraldine Watson. Her specimens are at TAES.

JL = Joe Liggio. He collected with LB and those specimens are at TAES.

SJ = Stanley Jones. His specimens are at TAES.

LB = Larry Brown. His specimens are at TAES, except for the few that are at SBSC indicated by (SBSC) after a collection number.

MM = Barbara and Michael MacRoberts. Their specimens are at TAES.

SH = Shawn Harper (Grandson of LB).

SM = Sam Harper (Grandson of LB).

SE = Sandra Elsik. Her specimens are at TAES.

WP = Warren Pruess. His specimens are at TAES.

EK = Eric Keith. His one collection is at TAES.

RH = Roland Harper (Grandson of LB).

DK = Dale Kruse. His one collection is at TAES.

NIX= Elray Nixon. His collections are at ASTC with some duplicates at SBSC.

WRC= Bill Carr. His collections are at TX.

* = exotic

+ = see note at end of list

A collection number followed by (J) is from Jasper County and a collection number followed by (T) is from Tyler County. All others are from Hardin County.

Acanthaceae

Justicia ovata (Walter) Lindau var. lanceolata (Chapm.) R.W. Long, WP 144

Ruellia caroliniensis (J.F. Gmel.) Steud., SJ 14204; LB 34575

Ruellia humilis Nutt., GW 2953; LBRH 34645

Ruellia pedunculata Torr. ex A. Gray, LB 34606

Aceraceae (see Sapindaceae)

Adoxaceae

Sambucus nigra L. subsp. canadensis (L.) Bollii, SJ 14306

Viburnum acerifolium L., SJ 14619

Viburnum dentatum L., SJ 14132; LBRH 33905

Viburnum nudum L. var. nudum, SEWP 460; LB 35106

Agavaceae

Yucca louisianensis Trel, LB 34235

Alismataceae

Echinodorus cordifolius (L.) Griseb., SJ 14288; LBSH 34723

Sagittaria latifolia Willd., LBSH 34184

Sagittaria papillosa Buchenau, WP 105

Sagittaria platyphylla (Engelm.) J.G. Smith, LBJL 34018

Alliaceae

Allium canadense L. var. mobilense (Regel) Ownbey, LB 34521

Nothoscordum bivalve (L.) Britton, SJ 14429

Altingiaceae

Liquidambar styraciflua L., LBSM 33728

Amaranthaceae

*Alternanthera philoxeroides (Mart.) Griseb., LBSH 34104

+*Alternanthera sessilis (L.) R. Br. ex DC., LB 34310

Froelichia floridana SJ 14411

Dysphanis ambrosioides (L.) Mosyakin & Clemants, SJ 14516; LB 35034

Anacardiaceae

Rhus copallinum L., SEWP 222

Toxicodendron pubescens Mill., LB 34595

Toxicodendron radicans (L.) Kuntze, WP 142; SJ 14621

Toxicodendron vernix (L.) Kuntze, LBJL 34036, 34031

Annonaceae

Asimina parviflora (Michx.) Dunal, GW 2948; LBRH 33900; LBSH 34191; LB 34610

Apiaceae (see Araliaceae for Hydrocotyle)

Centella erecta (L.f.) Fernald, MM 8012; SEWP 196

Chaerophyllum tainturieri Hook. var. dasycarpum Hook. ex S. Watson, LBSH 34393 (J)

*Cyclospermum leptophyllum (Pers.) Sprague ex Britton & P. Wilson, WP 131

Eryngium prostratum Nutt. ex DC., SEWP 206; LBSH 34713 Limnosciadium pumilum (Engelm. & A. Gray) Mathias & Constance, LB 34577

Ptilimnium capillaceum (Michx.) Raf., SJ 14194a, 14134, 14194; LB 34589

Sanicula canadensis L., WP 136; LBSH 33826 *Torilis nodosa (L.) Gaertn., LB 34520

Apocynaceae

Asclepias amplexicaulis Michx., SJ 14311 Asclepias obovata Elliott, SEWP 188; GW 2960 Asclepias perennis Walter, SJ 14337; LBSH 34954 +Gonolobus suberosus (L.) R.Br, var. granulatus (Scheele) Krings & O.Y. Xiang SJ 14146, 14305; LB 34529, 34986 Trachelospermum difforme (Walter) A. Gray, SJ 14340; LB 35088

Aquifoliaceae

Ilex ambigua (Michx.) Torr., SJ 14436, 14422, 14618; LBSH 34942

Ilex coriacea (Pursh) Chapm., WP 161; LB 35104 Ilex decidua Walter, LBSM 33720: LB 34257 Ilex longipes Chapm. ex Trelease, LBRH 33893 Ilex opaca Aiton, WP 156; LB 35075 Ilex vomitoria Aiton, SJ 14502

Araceae

Arisaema triphyllum (L.) Schott., GW 717

Araliaceae

Aralia spinosa L., SJ 14421; LBJL 34028 Hydrocotyle umbellata L., SJ 14366; LB 34211, 34316 Hydrocotyle verticillata Thunb., LB 34527

Aristolochiaceae

Aristolochia reticulata Jacq., SEWP 189 Aristolochia serpentaria L., LB 19218; SJ 14341

Asclepiadaceae (see Apocynaceae)

Bidens bipinnata L., LBJL 34014

LBJL 34027

Aspleniaceae

Asplenium platyneuron (L.) Britton, Sterns & Poggenb., SJ 3217

Asteraceae

Acmella repens (Walter) Rich., SJ 14319; LB 34975 Ambrosia artemisiifolia L., MM 8038; LB 34237 Ambrosia psilostachya DC., LBJL 34010 Ambrosia trifida L., LB 34217 Artemisia Iudoviciana Nutt., GW n18 Baccharis halimifolia L., GW 3297; LBJL 34015 Berlandiera pumila (Michx.) Nutt. var. scabrella Nesom & B.L. Turner, SJ 14190a; LBSH 33830; LB 34597 +Bidens aristosa (Michx.) Britton, SJ 14376; LBRH 34060; LB35071, 35184

Bidens laevis (L.) Britton, Sterns & Poggenb., LBSH 34097 Boltonia diffusa Elliott, SEWP 191; LB 35068 Bradburia pilosa (Nutt.) Semple, SJ 14418; LB 35019 Chrysopsis mariana (L.) Elliott, SEWP 295; LBRH 33888; LB

34224 Cirsium horridulum Michx., WP 080 Conoclinium coelestinum (L.) DC., MM 8024; SJ 14321 Conyza bonariensis (L.) Cronquist, LB 34159 Conyza canadensis (L.) Cronquist var. canadensis, SEWP 213;

Conyza canadensis (L.) Cronquist var. pusilla (Nutt.) Cronquist, SJ 14414

Coreopsis tinctoria Nutt., SJ 14228 Croptilon divaricatum (Nutt.) Raf., SEWP 390; LBRH 33899 Croptilon rigidifolium (E.B. Smith) E.B. Smith, LBSH 34951 Echinacea sanguinea Nutt., SJ 14210 Eclipta prostrata (L.) L., SEWP 311; LBSM 33764

Elephantopus carolinianus Raeusch., MM 8021 Elephantopus nudatus A. Gray, LBSH 34182a; LB 35103 Elephantopus tomentosus L., MM 8011; SJ 14420; LBRH 33885; LBJL 34040

Erechtites hieraciifolia (L.) Raf., MM 8070 Erigeron annuus (L.) C.P. Person, LB 34988 Erigeron philadelphicus L., WP 122; LB 34294 Erigeron strigosus Muhl. ex Willd., SJ 14205; LBJL 34001 Erigeron tenuis Torr. & A. Gray, WP 081 Eupatorium capillifolium (Lam.) Small, LBRH 33884

Eupatorium lancifolium (Torr. & A. Gray) Small, SEWP 220; LBSH 33828; LB 35004

Eupatorium perfoliatum L., LBSM 33765

Eupatorium x pinnatifidum Elliott, WRC 12489; LBRH 34051; LB 35158

Eupatorium rotundifolium L. var. rotundifolium, MM 8017; SJ 14500; LBSH 33827

Eupatorium semiserratum DC., LBSM 33757a; LBRH 33909; LBJL 34023; LBSH 34188

Eupatorium serotinum Michx., LBSM 33718a; LB 34217a Euthamia leptocephala (Torr. & A. Gray) Greene, LB 34519 *Facelis retusa (Lam.) Sch.-Bip., LB 34615 Gaillardia pulchella Foug., SEWP 197; LB 35100 Gamochaeta antillana (Urb.) Anderb., LB 34306 *Gamochaeta coarctata (Willd.) Kerguelen, SEWP 456 Gamochaeta purpurea (L.) Cabrera, SJ 14221; LBSH 34411; LB 34540

Gamochaeta pensylvanica (Willd.) Cabrera, LB 34306a Helenium amarum (Raf.) Rock var. amarum, WP 160 Helenium flexuosum Raf., LB 34619 Helianthus angustifolius L., SJ 14378; LB 34220

Heterotheca subaxillaris (Lam.) Britton & Rusby, LBSH 34086 Hieracium gronovii L., GW 2954; LBRH 33906

Hymenopappus artemisiifolius DC., SJ 14281

*Hypochaeris microcephala (Sch. Bip.) Cabrera, LB 34546 +Iva asperifolia Less. var. angustifolia (Nutt. ex DC.) B.L. Turner, SEWP 468; LBJL 33997

Iva annua L., SEWP 467; LBJL 34009 Krigia cespitosa (Raf.) K.L. Chambers var. cespitosa, LB 34550

Krigia virginica (L.) Willd., WP 125

Krigia wrightii (A. Gray) K.L. Chambers ex K.J. Kim, LB 34314; LBSH 34396 (J)

Lactuca canadensis L., LBRH 33891 Lactuca floridana (L.) Gaertn., SEWP 309

Liatris acidota Engelm. & A. Gray, 5J 14396

Liatris elegans (Walter) Michx. var. elegans, SEWP 280; LB 35005

Liatris squarrosa (L.) Michx. var. glabrata (Rydb.) Gaiser, GW 3507, 2975; LBSH 34928, LB 34993

+Liatris squarrosa (L.) Michx. var. squarrosa, LBSH 34928; LB 34993, 35006

Mikania scandens (L.) Willd. LBSM 33741

Packera obovata (Michx. ex Willd.) Weber & A. Löve, GW 3323; LB 34278

Pityopsis graminifolia (Michx.) Nutt. SEWP 193; LBSH 34180 Pluchea camphorata (L.) DC., LBSM 33762 Pluchea foetida (L.) DC., MM 8030; SJ 14384; LBJL 34033

+*Pseudognaphalium luteoalbum (L.) Hillard & B.L. Burtt, LB 34299

Pseudognaphalium obtusifolium (L) Hillard & Burtt, LB 34240,35022

Pyrrhopappus carolinianus (Walter) DC., SJ 14282; GW 2913

Pyrrhopappus pauciflorus DC., LB 34578

Rudbeckia hirta L., SJ 14217; LB 35098

Silphium asteriscus L. var. asteriscus, LB 35073

Smallanthus uvedalia (L.) Mack., SEWP 315; LBRH 33894

Solidago altissima L., LBRH 34058

Solidago nitida Torr. & A. Gray, SJ 14361; LB 35070

Solidago odora Aiton, SEWP 279

Solidago rugosa Mill. var. asper (Aiton) Fernald, SEWP 304, 297; LBSM 33752; LBRH 34049

Solidago stricta Aiton subsp. stricta, SEWP 465; LBSH 34186

*Soliva anthemifolia Kunth, SJ 14142; LB 34304; LBRH 34642

*Soliva sessilis Ruiz & Pavon, LB 34534

*Sonchus asper (L.) Hill, LBRH 34641

*Sonchus oleraceus L., LBSM 33753; LB 34576

+Symphyotrichum divaricatum (Nutt.) G.L. Nesom, LBJL 34042; LBSH 34102; LB 34216

Symphyotrichum dumosum (L.) G.L. Nesom, LBSH 34190; LB 34212, 34215

Symphyotrichum lateriflorum (L.) Á. Löve & D. Löve, LB 34222, 34605, 35116, 35154

Symphyotrichum racemosum (Elliott) G.L. Nesom, WP 135; LBSH 34166

Tetragonotheca Iudoviciana (Torr. & A. Gray) A. Gray ex Hall, SJ 14470

Verbesina virginica L., LBRH 34053

+Vernonia gigantea (Walter) Trel. ex Banner & Coville, LBSM 33768; LBRH 33887

Vernonia missurica Raf., SJ 26102; LBSH 33842

Vernonia texana (A. Gray) Small, LBSH 33825; LB 34992, 35003

*Youngia japonica (L.) DC., WP 108; LB 34281 Xanthium strumarium L., LBSH 34964

Balsaminaceae

Impatiens capensis Meerb., PR s.n.; SJ 14144

Berberidaceae

Podophyllum peltatum L., SE 4001

Betulaceae

Betula nigra L., LBSH 34079

Carpinus caroliniana Walter, LBSM 33718; LBSH 34079a; LB 34556

Ostrya virginiana (Mill.) K. Koch, SJ 14131; LBRH 34061

Bignoniaceae

Bignonia capreolata L., WP 072

Campsis radicans (L.) Seem. ex Bureau, LBSH 33833

Blechnaceae

Woodwardia areolata (L.) T. Moore, SJ 14283; LBJL 34034 Woodwardia virginica (L.) J.E.Smith, SEWP 377; LBSH 34410

Boraginaceae

*Heliotropium indicum L., LBSH 34965

Heliotropium procumbens Mill., SJ 14455; LB 34343

Myosotis macrosperma Engelm., LBSH 34402 (J)

Brassicaceae

*Cardamine flexuosa With. subsp. debilis O.E. Schultz. D. Don, LB 34312

Lepidium virginicum L., SJ 14208

Rorippa palustris Besser, LB 34302

Rorippa sessiliflora (Nutt.) Hitchc., LB 34313; LBSH 34392 (J)

Bromeliaceae

Tillandsia usneoides (L.) L., SJ 14206; LB 34261

Buddlejaceae (see Tetrachondraceae for Polypremum)

Burmanniaceae

Apteria aphylla (Nutt.) Barnhart ex Small, SJ 14181a

Cactaceae

Opuntia humifusa (Raf.) Raf., LBSH 33834a; LB 34611

Campanulaceae

Lobelia appendiculata A. DC., LB 34541

Lobelia cardinalis L., LBSH 34174

Lobelia flaccidifolia Small, SJ 14397

Lobelia puberula Michx., SEWP 296; LBRH 34047

Triodanis biflora Greene, LBSH 34398 (J), 34650 (J); LB 34539

Triodanis perfoliata (L.) Nieuwl., GW 3234

*Wahlenbergia marginata (Thunb.) A. DC., CL s.n., LBSH 33839; LB 34292

Cannabaceae

Celtis laevigata Willd, LBSH 34406 (J)

Caprifoliaceae (see Adoxaceae for Sambucus and Viburnum)

*Lonicera japonica Thunb., LBSM 33770

Caryophyllaceae

*Cerastium glomeratum Thuill., LB 34285 Silene antirrhina L., LBRH 34635

Chenopodiaceae (see Amaranthaceae for Dysphanis)

Cistaceae

Helianthemum carolinianum (Walter) Michx., LB 34288 Helianthemum georgianum Chapm., WP 167; LBSH 33837, 34199

Lechea mucronata Raf., SJ 14483, 14189 +Lechea minor L., LB 34601, 35011 (SBSC); LBSH 34929

Cleomaceae

*Cleome hassleriana Chodat, GW 188

Clethraceae

Clethra alnifolia L., LB 19220; SJ 14472, 14431; LBJL 34029

Commelinaceae

Commelina erecta L., SJ 14137, 14185; LB 34604, 34982 Commelina virginica L., SJ 14313, 14524; LB 35079 Tradescantia ohiensis Raf., LB 34315; LBSH 34397 (J) Tradescantia reverchonii Bush, SJ 14186

Convolvulaceae

Cuscuta compacta Choisy, SEWP 302
Cuscuta gronovii Willd., LB 34207
Dichondra caroliniensis Michx., LBSH 34412
Ipomoea cordatotriloba Dennst., SEWP 277; LBSM 33777

Ipomoea lacunosa L., LB 35090, 35113 Ipomoea pandurata (L.) G. Mey., LBSH 34943 Jacquemontia tamnifolia (L.) Griseb., SEWP 304

Cornaceae (see Nyssaceae for the genus Nyssa) Cornus florida L., SEWP 3005; LB 34289; WP 083 (SBSC) Cornus foemina Mill., LB 34231

Crassulaceae (see Penthoraceae for the genus Penthorum)

Cucurbitaceae

Cayaponia quinqueloba (Raf.) Shinners, SJ 14522; LBSH 34710

*Citrullus vulgaris Schrad. ex Eckl. & Zeyh., LB 35161

*Cucumis melo L., LB 35114

Melothria pendula L., LBSM 33736

Cupressaceae

Juniperus virginiana L. var. virginiana, LBJL 34005 Taxodium distichum (L.) Rich. var. distichum, LBSH 33845

Cuscutaceae (see Convolvulaceae for the genus Cuscuta)

Cyperaceae

Bulbostylis barbata (Rottb.) Clarke, SJ 14428

Bulbostylis ciliatifolia (Elliott.) Fernald var. coarctata (Elliott) Kral, SJ 14129, 14469; LBRH 33902; LB 35036

Carex abscondita Mack., SJ 14127; LB 34579; LBSH 34648 (J)

Carex atlantica L.H. Bailey subsp. capillacea (L H. Bailey) Reznicek, LBJL 33995

Carex brevior (Dewey) Mack. ex Lunell, LBSH 34395 (J); LB 34528

Carex cherokeensis Schwein., LB 34978

Carex complanata Torr. & Hook., LBSH 34413a

Carex debilis Michx., LB 34545

Carex digitalis Schkuhr ex Willd. var. floridana (L.H. Bailey) Naczi & Bryson, SJ 14595

Carex flaccosperma Dewey, LBSH 34394 (J); LB 34549

Carex frankii Kunth, LB 34581

Carex gigantea Rudge, SJ 14147

Carex glaucescens Elliott, LBSH 34037

Carex joorii L H. Bailey, NIX 15988; SJ 14473; LBSM 33756

Carex leptalea Wahlenb. subsp. harperi (Fernald.) W. Stone, SJ 14145; LBJL 33996

Carex nigromarginata Schwein var. floridana (Schwein.) Kük., SJ 13708; LB 34283

Carex reniformis (L.H. Bailey) Small, LB 34536, 34586

Carex tribuloides Wahlenb. var. sangamonensis Clokey, SJ 14136

Carex verrucosa Muhl., SEWP 376, 375

Cladium jamaicense Crantz, LBSH 34667

Cyperus acuminatus Torr. & Hook. ex Torr., LB34602

Cyperus compressus L., SJ 14486

Cyperus croceus Vahl, SJ 14487, 145124; LBJL 340342; LBRH 34637

Cyperus elegans L., SEWP 463; LB 35101

*Cyperus entrerianus Bockeler, LBSM 33743

Cyperus erythrorhizos Muhl., SJ 14440, 14457; LB 35085, 35089

*Cyperus esculentus L., SJ 14441; LBSH 34163

Cyperus flavescens L., LBRH 34059

Cyperus grayoides Mohlenbr., SJ 14479

Cyperus haspan L., SEWP 369; LBSM 33760

Cyperus hystricinus Fernald, SJ 14471, 14491; LB 34221

*Cyperus iria L., SJ 14494

Cyperus odoratus Vahl, SJ 14442; LBSH 34078, 34163a, 34970

Cyperus polystachyos Rottb., SJ 14443; LBSH 34162

Cyperus pseudovegetus Steud., SJ 14344; LBSM 33748; LBSH 34960

Cyperus retroflexus Buckley, SJ 14490; LBSH 34958; LB 35016 Cyperus retrorsus Buckley, SJ 14330; LBSM 33740; LBJL 34030

Cyperus squarrosus L., SJ 14451a

Cyperus strigosus L., SJ 14379 Cyperus surinamensis Rottb., SJ 14444; LBSH 34100; LB 35112

Cyperus virens Michx., SJ 14316

Eleocharis microcarpa Torr., MM 8022; LBSH 33831

Eleocharis montana (Kunth) Roem. & Schult., LBSH 34183

Eleocharis obtusa (Willd.) Schult., SJ 14314

Eleocharis tuberculosa (Michx.) Romer & Schult., SEWP 374

Fimbristylis autumnalis (L.) Roem. & Schult., 5J 14446

Fimbristylis dichotoma (L.) Vahl, SJ 14365

*Fimbristylis miliacea (L.) Vahl, NIX 16005 (SBSC); LB 35031

Fimbristylis vahlii (Lam.) Link, DK 1614; LBSH 34962

Fuirena breviseta (Coville) Coville, SJ 14395

Kyllinga pumila (Torr.) Spreng., SEWP 312; LBSH 33820; LB 34563, 35030

Rhynchospora caduca Elliott, LBRH 34630; LBSH 34664

Rhynchospora colorata (L.) H. Pfeiff., LB 34660

Rhynchospora corniculata (Lam.) A. Gray; MM 8025, SJ 14474, 14318, 14149

Rhynchospora elliottii Elliott, SJ 14390

Rhynchospora globularis (Chapm.) Small var. globularis, SEWP 446; LB 34599

Rhynchospora glomerata (L.) Vahl, SJ 14405, 14355; LBJL 34043; LBSH 34938

Rhynchospora grayi Kunth, SJ 14480a, 14480

Rhynchospora inexpansa (Michx.) Vahl, SJ 14404; LBSM 33759

Rhynchospora latifolia (Bald. ex Elliott) Thomas, SJ 14391

Rhynchospora mixta Britton, LB 19218b, 19221; SJ 14150 Rhynchospora recognita (Gale) Kral, LBRH 34644; LBSH

Schoenoplectus californicus (Meyer) Sojak, SJ 14153

Scirpus cyperinus L., LBJL 34000

+Scirpus divaricatus Elliott, GW 3495; SEWP 320; LBSM 33766; LB 34980

Scleria ciliata Michx. var. ciliata, LB 34600

Scleria oligantha Michx., LB 34552

Scleria pauciflora Muhl. ex Willd., SEWP 294

Scleria triglomerata Michx., SJ 14357

Cyrillaceae

34665

Cyrilla racemiflora L., SJ 14230

Dennstaeditaceae

Pteridium aquilinum (L.) Kuhn var. pseudocaudatum (Clute) Heller, GW 2953; LBSH 34179

Dioscoreaceae

Dioscorea villosa L., SEWP 314

Droseraceae

Drosera brevifolia Pursh, LB 34596 Drosera capillaris Poir., SJ 14398

Dryopteridaceae (see Woodsiaceae for Athyrium and Onocleaceae for Onoclea)

Dryopteris Iudoviciana (Kunze) Small, GW 678; SJ 14285; LBJL 34021

Polystichum acrostichoides (Michx.) Schott, LBSM 33751

Ebenaceae

Diospyros virginiana L., LBSM 33725

Equisetaceae

Equisetum hyemale L., GW 3352

Ericaceae

Lyonia ligustrina (L.) DC., SJ 14562

Rhododendron canescens (Michx.) Sweet, SJ 13709; LB 34282

Rhododendron viscosum (L.) Torr., SJ 14289

Vaccinium arboreum Marsh., SJ 14503

Vaccinium corymbosum L., SJ 14358

Vaccinium elliottii Chapm., LB 34296

Vaccinium stamineum L., SEWP 192

Euphorbiaceae (see Phyllanthaceae for Phyllanthus)

Acalypha gracilens A. Gray var. gracilens, SJ 14413; LB 34991

Acalypha virginica L., LBSH 34167; LB 34233

*Caperonia palustris A. St-Hil., LB 35109

Chamaesyce humistrata (Engelm. ex A. Gray) Small, LBRH 33892

Chamaesyce maculata (L.) Small, LBSH 34192, 34949, 34969

Chamaesyce nutans (Lag.) Small, GW 2951; LB 35062

Chamaesyce serpens (Kunth) Small, LBJL 34016; LBSH 34662

Cnidoscolus texanus (Muell. Arg.) Small, LB 34229

Croton capitatus Michx., MM 8015; SJ 14482

Goton glandulosus L. var. glandulosus, SEWP 286; LBSH 34932

Croton michauxii Webster, SJ 14415; LBSH 33838

Croton monanthogynus Michx., SEWP 471; LBJL 34008

Croton willdenowii Webster, SJ 14478; LB 34238, 35029

Euphorbia corollata L., MM 8033; SJ 14220; LB 35152

"Manihot grahamii Hook., GW 446

Sebastiania fruticosa (Bartr.) Fernald, SJ 14126

Stillingia sylvatica L., SJ 14495

Tragia smallii Shinners, LB 34591

Tragia urens L., SJ 14195; LB 35076

Tragia urticifolia Michx., LBRH 33883; LB 35188

'Triadica sebiferum (L.) Small, LBSH 33832

Fabaceae

*Aeschynomene indica L., LB 34209, 35111

*Albizia julibrissin Durazzini, LBSM 33718

Amorpha fruticosa L., LBSH 338411; LBRH 34640; LB 35169

Astragalus leptocarpus Torr. & A. Gray, LB 34297

Centrosema virginianum (L.) Benth., SJ 14184; LBRH 33897

Cercis canadensis L. var. canadensis, LB 34561

Chamaecrista fasciculata (Michx.) Greene, SJ 14187

Chamaecrista nictitans (L.) Moench., LBSH 33850

Oitoria mariana L., SJ 14424; LBSM 33727

Crotalaria sagittalis L., SJ 14212, 14483a

Dalea phleoides (Torr. & A. Gray) Shinners var. phleoides, GW 2919

Dalea villosa (Nutt.) K. Spreng. var. grisea (Torr. & A. Gray) Barneby, SJ 14209

Desmanthus illinoensis (Michx.) B. L. Rob. & Fernald, SJ 14427 Desmodium ciliare (Willd.) DC., SJ 13967; GW 3313b; LBSH,33824, 34089

+Desmodium fernaldii B.G. Schub., LB 35021

Desmodium glabellum (Michx.) DC., LB 35061

Desmodium laevigatum (Nutt.) DC., LBSH 33840, 34927; LB 35083

Desmodium lineatum DC., LB 35063

Desmodium obtusum (Muhl. ex Willd.) DC., LBSH 34090

Desmodium paniculatum (L.) DC., GW 3416, 2957; LBSM 33735, 33772

+Desmodium viridiflorum (L.) DC., LBSH 33852; LB 35033; LBRH 34065; PR s.n. (T)

Erythrina herbacea L., WP 159

+Galactia regularis (L.) Britton, Sterns, & Poggenb., SJ 14416; LBRH 33901;SEWP 454; LBJL 34017

Gleditsia aquatica Marshall, SJ 14448; LBSH 34400 (J)

Glottidium vesicarium (Jacq.) Harper, SEWP 300; LB 34076

*Indigofera suffruticosa Mill., LBSH 34725

*Kummerowia striata (Thunb. ex Murray) Schindl., LB 34264

+Lackeya multiflora (Torr, & A. Gray) Fortuna, L.P. Queiroz & C.P. Lewis, LBSM 33730; LB 34590; LBRH 34633

Lespedeza hirta (L.) Hornem. subsp. hirta, SJ 14199, 14475; LBSH 33836; LB 34236

Lespedeza repens (L.) Bart., LBSM 33737

*Medicago lupulina L., WP 084

Mimosa hystricina (Small) Turner, LB 34543

Mimosa strigillosa Torr. & A. Gray, SJ 14409

Neptunia pubescens Benth., LBSH 34661

*Pueraria montana (Lour.) Merrill var. lobata (Willd.) Van der Maesen & Almeida, SJ 14335

Rhynchosia difformis (Elliott) DC., SJ 14498; LBSH 34722

Rhynchosia latifolia Nutt. ex Torr. & A. Gray, SJ 14123; LB 35018

Rhynchosia reniformis DC., SEWP 285; LB 34557

Senna occidentalis (L.) Link, WP 153

Sesbania drummondii (Rydb.) Cory, LBSH 33846

Sesbania herbacea (Mill.) McVaugh, LBRH 33910

Strophostyles helvola (L.) Elliott, LBSH 34076a

Strophostyles leiosperma (Torr. & A. Gray) Piper, LBSH 34716 Strophostyles umbellata (Willd.) Britton, MM 8037; SEWP 301; GW 3417; LBSH 34935

Stylosanthes biflora (L.) Britton, Sterns & Poggenb., MM 8035; SJ 14218; LB 35008

Tephrosia onobrychoides Nutt., SJ 14383

Tephrosia virginiana (L.) Pers., SJ 14222; LB 34594

*Trifolium campestre Schreb., LB 34298, 34574

*Trifolium repens L., WP 123

Vicia Iudoviciana Nutt. subsp. Iudoviciana, LB 34295

Vicia minutiflora A. Dietr., LB 34256, 34585; LBSH 34405 (J)

Wisteria frutescens (L.) Poir., SJ 14568, 14343

Ipomoea lacunosa L., LB 35090, 35113 Ipomoea pandurata (L.) G. Mey., LBSH 34943 Jacquemontia tamnifolia (L.) Griseb., SEWP 304

Cornaceae (see Nyssaceae for the genus Nyssa)
Cornus florida L., SEWP 3005; LB 34289; WP 083 (SBSC)
Cornus foemina Mill., LB 34231

Crassulaceae (see Penthoraceae for the genus Penthorum)

Cucurbitaceae

Cayaponia quinqueloba (Raf.) Shinners, SJ 14522; LBSH 34710

*Citrullus vulgaris Schrad. ex Eckl. & Zeyh., LB 35161

*Cucumis melo L., LB 35114

Melothria pendula L., LBSM 33736

Cupressaceae

Juniperus virginiana L. var. virginiana, LBJL 34005 Taxodium distichum (L.) Rich. var. distichum, LBSH 33845

Cuscutaceae (see Convolvulaceae for the genus Cuscuta)

Cyperaceae

Bulbostylis barbata (Rottb.) Clarke, SJ 14428

Bulbostylis ciliatifolia (Elliott.) Fernald var. coarctata (Elliott) Kral, SJ 14129, 14469; LBRH 33902; LB 35036

Carex abscondita Mack., SJ 14127; LB 34579; LBSH 34648 (J)

Carex atlantica L.H. Bailey subsp. capillacea (L H. Bailey) Reznicek, LBJL 33995

Carex brevior (Dewey) Mack. ex Lunell, LBSH 34395 (J); LB 34528

Carex cherokeensis Schwein., LB 34978

Carex complanata Torr. & Hook., LBSH 34413a

Carex debilis Michx., LB 34545

Carex digitalis Schkuhr ex Willd. var. floridana (L.H. Bailey) Naczi & Bryson, SJ 14595

Carex flaccosperma Dewey, LBSH 34394 (J); LB 34549

Carex frankii Kunth, LB 34581

Carex gigantea Rudge, SJ 14147

Carex glaucescens Elliott, LBSH 34037

Carex joorii L H. Bailey, NIX 15988; SJ 14473; LBSM 33756

Carex leptalea Wahlenb. subsp. harperi (Fernald.) W. Stone, SJ 14145; LBJL 33996

Carex nigromarginata Schwein var. floridana (Schwein.) Kük., SJ 13708; LB 34283

Carex reniformis (L.H. Bailey) Small, LB 34536, 34586

Carex tribuloides Wahlenb. var. sangamonensis Clokey, SJ 14136

Carex verrucosa Muhl., SEWP 376, 375

Cladium jamaicense Crantz, LBSH 34667

Cyperus acuminatus Torr. & Hook. ex Torr., LB34602

Cyperus compressus L., SJ 14486

Cyperus croceus Vahl, SJ 14487, 145124; LBJL 340342; LBRH 34637

Cyperus elegans L., SEWP 463; LB 35101

*Cyperus entrerianus Bockeler, LBSM 33743

Cyperus erythrorhizos Muhl., SJ 14440, 14457; LB 35085, 35089

*Cyperus esculentus L., SJ 14441; LBSH 34163

Cyperus flavescens L., LBRH 34059

Cyperus grayoides Mohlenbr., SJ 14479

Cyperus haspan L., SEWP 369; LBSM 33760

Cyperus hystricinus Fernald, SJ 14471, 14491; LB 34221

*Cyperus iria L., SJ 14494

Cyperus odoratus Vahl, SJ 14442; LBSH 34078, 34163a, 34970 Cyperus polystachyos Rottb., SJ 14443; LBSH 34162

Cyperus pseudovegetus Steud., SJ 14344; LBSM 33748; LBSH 34960

Cyperus retroflexus Buckley, SJ 14490; LBSH 34958; LB 35016 Cyperus retrorsus Buckley, SJ 14330; LBSM 33740; LBJL 34030 Cyperus squarrosus L., SJ 14451a

Cyperus strigosus L., SJ 14379

Cyperus surinamensis Rottb., SJ 14444; LBSH 34100; LB 35112

Cyperus virens Michx., SJ 14316

Eleocharis microcarpa Torr., MM 8022; LBSH 33831

Eleocharis montana (Kunth) Roem. & Schult., LBSH 34183

Eleocharis obtusa (Willd.) Schult., SJ 14314

Eleocharis tuberculosa (Michx.) Romer & Schult., SEWP 374 Fimbristylis autumnalis (L.) Roem. & Schult., SJ 14446

Fimbristylis dichotoma (L.) Vahl, SJ 14365

*Fimbristylis miliacea (L.) Vahl, NIX 16005 (SBSC); LB 35031 Fimbristylis vahlii (Lam.) Link, DK 1614; LBSH 34962

Fuirena breviseta (Coville) Coville, SJ 14395

Kyllinga pumila (Torr.) Spreng., SEWP 312; LBSH 33820; LB 34563, 35030

Rhynchospora caduca Elliott, LBRH 34630; LBSH 34664 Rhynchospora colorata (L.) H. Pfeiff., LB 34660

Rhynchospora corniculata (Lam.) A. Gray; MM 8025, SJ 14474, 14318, 14149

Rhynchospora elliottii Elliott, SJ 14390

Rhynchospora globularis (Chapm.) Small var. globularis, SEWP 446; LB 34599

Rhynchospora glomerata (L.) Vahl, SJ 14405, 14355; LBJL 34043; LBSH 34938

Rhynchospora grayi Kunth, SJ 14480a, 14480

Rhynchospora inexpansa (Michx.) Vahl, SJ 14404; LBSM 33759

Rhynchospora latifolia (Bald. ex Elliott) Thomas, SJ 14391 Rhynchospora mixta Britton, LB 19218b,19221; SJ 14150

Rhynchospora recognita (Gale) Kral, LBRH 34644; LBSH 34665

Schoenoplectus californicus (Meyer) Sojak, SJ 14153

Scirpus cyperinus L., LBJL 34000 +Scirpus divaricatus Elliott, GW 3495; SEWP 320; LBSM 33766;

LB 34980 Scleria ciliata Michx. var. ciliata, LB 34600

Scleria oligantha Michx., LB 34552

Scleria pauciflora Muhl. ex Willd., SEWP 294

Scleria triglomerata Michx., SJ 14357

Cyrillaceae

Cyrilla racemiflora L., SJ 14230

Dennstaeditaceae

Pteridium aquilinum (L.) Kuhn var. pseudocaudatum (Clute) Heller, GW 2953; LBSH 34179

Dioscoreaceae

Dioscorea villosa L., SEWP 314

Droseraceae

Drosera brevifolia Pursh, LB 34596 Drosera capillaris Poir., SJ 14398

Dryopteridaceae (see Woodsiaceae for Athyrium and Onocleaceae for Onoclea)

Dryopteris Iudoviciana (Kunze) Small, GW 678; SJ 14285; LBJL 34021

Polystichum acrostichoides (Michx.) Schott, LBSM 33751

Ebenaceae

Diospyros virginiana L., LBSM 33725

Equisetaceae

Equisetum hyemale L., GW 3352

Ericaceae

Lyonia ligustrina (L.) DC., SJ 14562

Rhododendron canescens (Michx.) Sweet, SJ 13709; LB 34282

Rhododendron viscosum (L.) Torr., SJ 14289

Vaccinium arboreum Marsh., SJ 14503

Vaccinium corymbosum L., SJ 14358

Vaccinium elliottii Chapm., LB 34296

Vaccinium stamineum L., SEWP 192

Euphorbiaceae (see Phyllanthaceae for Phyllanthus)

Acalypha gracilens A. Gray var. gracilens, SJ 14413; LB 34991

Acalypha virginica L., LBSH 34167; LB 34233

*Caperonia palustris A. St-Hil., LB 35109

Chamaesyce humistrata (Engelm. ex A. Gray) Small, LBRH 33892

Chamaesyce maculata (L.) Small, LBSH 34192, 34949, 34969

Chamaesyce nutans (Lag.) Small, GW 2951; LB 35062

Chamaesyce serpens (Kunth) Small, LBJL 34016; LBSH 34662

Cnidoscolus texanus (Muell. Arg.) Small, LB 34229

Croton capitatus Michx., MM 8015; SJ 14482

Croton glandulosus L. var. glandulosus, SEWP 286; LBSH 34932

Croton michauxii Webster, SJ 14415; LBSH 33838

Croton monanthogynus Michx., SEWP 471; LBJL 34008

Croton willdenowii Webster, SJ 14478; LB 34238, 35029

Euphorbia corollata L., MM 8033; SJ 14220; LB 35152

*Manihot grahamii Hook., GW 446

Sebastiania fruticosa (Bartr.) Fernald, SJ 14126

Stillingia sylvatica L., SJ 14495

Tragia smallii Shinners, LB 34591

Tragia urens L., SJ 14195; LB 35076

Imagia urticifolia Michx., LBRH 33883; LB 35188

*Triadica sebiferum (L.) Small, LBSH 33832

Fabaceae

*Aeschynomene indica L., LB 34209, 35111

*Albizia julibrissin Durazzini, LBSM 33718

Amorpha fruticosa L., LBSH 338411; LBRH 34640; LB 35169

Astragalus leptocarpus Torr. & A. Gray, LB 34297

Centrosema virginianum (L.) Benth., SJ 14184; LBRH 33897

Gercis canadensis L. var. canadensis, LB 34561

Chamaecrista fasciculata (Michx.) Greene, SJ 14187

Chamaecrista nictitans (L.) Moench., LBSH 33850

Olitoria mariana L., SJ 14424; LBSM 33727

Crotalaria sagittalis L., SJ 14212, 14483a

Dalea phleoides (Torr. & A. Gray) Shinners var. phleoides, GW 2919

Dalea villosa (Nutt.) K. Spreng. var. grisea (Torr. & A. Gray) Barneby, SJ 14209

Desmanthus illinoensis (Michx.) B. L. Rob. & Fernald, SJ 14427 Desmodium ciliare (Willd.) DC., SJ 13967; GW 3313b; LBSH,33824, 34089

+Desmodium fernaldii B.G. Schub., LB 35021

Desmodium glabellum (Michx.) DC., LB 35061

Desmodium laevigatum (Nutt.) DC., LBSH 33840, 34927; LB 35083

Desmodium lineatum DC., LB 35063

Desmodium obtusum (Muhl. ex Willd.) DC., LBSH 34090

Desmodium paniculatum (L.) DC., GW 3416, 2957; LBSM 33735, 33772

+Desmodium viridiflorum (L.) DC., LBSH 33852; LB 35033; LBRH 34065; PR s.n. (T)

Erythrina herbacea L., WP 159

+Galactia regularis (L.) Britton, Sterns, & Poggenb., SJ 14416; LBRH 33901;SEWP 454; LBJL 34017

Gleditsia aquatica Marshall, SJ 14448; LBSH 34400 (J)

Glottidium vesicarium (Jacq.) Harper, SEWP 300; LB 34076

*Indigofera suffruticosa Mill., LBSH 34725

*Kummerowia striata (Thunb. ex Murray) Schindl., LB 34264

+Lackeya multiflora (Torr. & A. Gray) Fortuna, L.P. Queiroz & C.P. Lewis, LBSM 33730; LB 34590; LBRH 34633

Lespedeza hirta (L.) Hornem. subsp. hirta, SJ 14199, 14475; LBSH 33836; LB 34236

Lespedeza repens (L.) Bart., LBSM 33737

*Medicago lupulina L., WP 084

Mimosa hystricina (Small) Turner, LB 34543

Mimosa strigillosa Torr. & A. Gray, SJ 14409

Neptunia pubescens Benth., LBSH 34661

*Pueraria montana (Lour.) Merrill var. lobata (Willd.) Van der Maesen & Almeida, SJ 14335

Rhynchosia difformis (Elliott) DC., SJ 14498; LBSH 34722

Rhynchosia latifolia Nutt. ex Torr. & A. Gray, SJ 14123; LB 35018

Rhynchosia reniformis DC., SEWP 285; LB 34557

Senna occidentalis (L.) Link, WP 153

Sesbania drummondii (Rydb.) Cory, LBSH 33846

Sesbania herbacea (Mill.) McVaugh, LBRH 33910

Strophostyles helvola (L.) Elliott, LBSH 34076a

Strophostyles leiosperma (Torr. & A. Gray) Piper, LBSH 34716

Strophostyles umbellata (Willd.) Britton, MM 8037; SEWP 301; GW 3417; LBSH 34935

Stylosanthes biflora (L.) Britton, Sterns & Poggenb., MM 8035; SJ 14218; LB 35008

Tephrosia onobrychoides Nutt., SJ 14383

Tephrosia virginiana (L.) Pers., SJ 14222; LB 34594

*Trifolium campestre Schreb., LB 34298, 34574

*Trifalium range | W/D 177

*Trifolium repens L., WP 123

Vicia Iudoviciana Nutt. subsp. Iudoviciana, LB 34295

Vicia minutiflora A. Dietr., LB 34256, 34585; LBSH 34405 (J)

Wisteria frutescens (L.) Poir., SJ 14568, 14343

Fagaceae

Castanea pumila (L.) Mill., WP 140; SJ 14329; LB 34989 Fagus grandifolia Ehrh., MM 8036; SJ 13704; LBJL 33024 Quercus alba L., WP 141; LBRH 34052 Quercus falcata Michx., SEWP 199

Quercus hemisphaerica W. Bartram ex Willd., SJ 14331; LBSM 33719

Quercus incana W. Bartram, SJ 14468; LB 34593

Quercus laurifolia Michx., SEWP 319; LBJL 34003; LBSH 34092

Quercus lyrata Walter, WP 151; LBSM 33722

Quercus margaretta (Ashe) Ashe, SJ 14139; LBSH 34073

Quercus michauxii Nutt., WP 146

Quercus nigra L., WP 152

Quercus velutina Lam., LB 34243

Quercus virginiana Mill., SJ 14504, 14327

Gelsemiaceae

Gelsemium sempervirens (L.) Aiton f., SEWP 3015

Gentianaceae

*Centaurium pulchellum (Sw.) Druce, WP 075; LB 34562 Sabatia angularis (L.) Pursh, SJ 14388 Sabatia campestris Nutt., LB 34559

Geraniaceae

Geranium carolinianum L., WP 079

Grossulariaceae (see Iteaceae for Itea)

Haloragaceae

Proserpinaca palustris L., SJ 14181

Hamamelidaceae (see Altingiaceae for Liquidambar) Hamamelis virginiana L., SJ 14433; LB 35013

Hydrocharitaceae

Limnobium spongia (Bosc.) Rich. ex Steud., LB 35170

Hydroleaceae

Hydrolea ovata Nutt., MM 8014; SJ 14374 Hydrolea uniflora Raf., LB 34981

Hydrophyllaceae (see Hydroleaceae)

Hypericaceae

Hypericum densiflorum Pursh, SJ 14438

Hypericum drummondii (Grev. & Hook.) Torr. & A. Gray, LBRH 33881; LB 35007a

Hypericum galioides Lam., SJ 14375; LBSH 34936

Hypericum gentianoides (L.) Britton, Sterns & Poggenb., LBSH 33848; LB 35007

Hypericum gymnanthum Engelm. & A. Gray, SJ 14214; GW 160

Hypericum hypericoides (L.) Crantz, MM 8027 Hypericum mutilum L., LBSM 33754

Triadenum walteri (J. G. Gmel.) Gleason, SJ 14403

Triadenum tubulosum (Walter) Gleason, GW 2993; LBSH 34646 (J); LB 34985, 35168

Hypoxidaceae

Hypoxis curtissii Rose, SJ 14345; LB 34219 Hypoxis wrightii (Baker) Brackett, WP 073; LB 35077

Iridaceae

Alophia drummondii (Graham) Foster, LBSM 33771; SJ 14188 Sisyrinchium atlanticum E.P. Bicknell, LB 34566 Sisyrinchium rosulatum E.P. Bicknell, GW 1035b; LB 34535

Iteaceae

Itea virginica L., WP 137

Juglandaceae

Carya aquatica (Michx. f.) Nutt., LBSH 33844; LBRH 34625; WP 174 (J) at SBSC

Carya cordiformis (Wang.) K. Koch, GW 2950; LBSH 34093, 34649 (J); LB 34580

Carya glabra (Mill.) Sweet, LBSH 34072, 34419

Carya texana Buckley, LBRH 34046

Carya tomentosa (Lam.) Nutt., SJ 14300; LBSH 33817 LBRH 34639

Juncaceae

Juncus acuminatus Michx., LBSM 33746; LB 34565; LBRH 34632

*Juncus capitatus Weigel, WRC 12488

Juncus coriaceus Mack., 5J 14356

Juncus dichotomus Elliott, LBSH 34663

Juncus diffusissimus Buckley, LBSH 34164, 34707

Juncus effusus L., WP 106

Juncus marginatus Rostk., LB 34609

Juncus repens Michx., LBSM 33757

Juncus tenuis Willd., LB 34308

Juncus validus Coville, SEWP 464

Lamiaceae

Callicarpa americana L., MM 8031; SJ 141 Hyptis alata (Raf.) Shinners, MM 8028; SJ 14426 Lycopus rubellus Moench., MM 8000; SEWP 310; LB 35105 Lycopus virginicus L., LBSH 34189, 34173

Monarda punctata L var. lasiodonta A. Gray, SJ 14459a; LBRH 33896

*Perilla frutescens (L.) Britton, LBSM 33775

Prunella vulgaris L., SJ 14225

Pycnanthemum albescens Torr. & A. Gray, LBSM 33774

Pycnanthemum tenuifolium Schrad., WP 166; SJ 14227, 14351; LBSH 34934

Salvia lyrata L., LBSM 33773; LBJL 34020; LB 34533

Scutellaria elliptica Muhl., LB 34277, 34553

Scutellaria integrifolia L., SEWP 308; LB 34608

Teucrium canadense L., SJ 14138; LBSH 34649 (J)

Trichostema dichotomum L., LBRH 34064

*Vitex negundo L. var. intermedia (P'ei) Moldenke, SJ 14350

Lauraceae

*Cinnamomum camphora (L.) J. Presl, LB 35182 Persea borbonia (L.) Spreng., LBRH 33898 Persea palustris (Raf.) Sarg., WP 158; LBJL 34041; LB 35107 Sassafras albidum (Nutt.) Nees, SEWP 208

Lentibulariaceae

Utricularia radiata Small, SJ 14429

Linaceae

Linum medium (Planch.) Britton var. texanum (Planch.) Femald SJ 14362

Linum striatum Walter, SJ 14211

Linderniaceae

*Lindernia crustacea (L.) F. von Muell., LBSH 33821 Lindernia dubia (L.) Penn., SJ 14342, 14449; LBSH 33821

Loganiaceae (see Gelsemiaceae for Gelsemium)

Mitreola petiolata (J. F. Gmel.) Torr. & A. Gray, MM 8016; SJ 14224: LBSM 33764

Lycopodiaceae

Lycopodiella appressa (Chapm.) Cranfill, LB 34279

Lygodiaceae

*Lygodium japonicum (Thunb. ex Murray) Sw., MM 8019; WP 163

Lythraceae

Ammannia x coccinea Rottb., SJ 14452

*Cuphea carthagenensis (Jacq.) J. F. Macbr., WRC 12487; LBRH 33911

Lythrum alatum Pursh var. lanceolatum (Elliott) A. Gray, LBSH 34717

Rotala ramosior (L.) Koehne, LBRH 33912; LB 35119

Magnoliaceae

Magnolia grandiflora L., SEWP 200

Magnolia virginiana L., LBSM 33744; SEWP 214

Malvaceae

Malvaviscus arboreus Dill ex Cav. var. drummondii (Torr. & A. Gray) Schery, LB 35038

Modiola caroliniana (L.) G. Don, LB 34531

Hibiscus laevis All., SJ 14453; LBSH 34172

Hibiscus moscheutos L., subsp. lasiocarpos (Cav.) O.J. Blanchard, SJ 14286

Sida rhombifolia L., SJ 14400, 14517; LBSH 34169

Tilia americana L., LBJL 34035; LB 34547

Melastomataceae

Rhexia mariana L. var. mariana, MM 8024; LBSM 33749; SJ 14410, 14338

Meliaceae

'Melia azedarach L., WP 157

Molluginaceae

*Glinus radiatus (Ruiz & Pav.) Rohrbach, SJ 14450; LB 35163 *Mollugo verticillata L., SJ 14407, 14519; LBSH 34957

Moraceae

Morus rubra L., SEWP 210

Myricaceae

Morella caroliniensis Mill., SJ 13705; LB 35102

Morella cerifera (L.) Small, WP 104; LB 34287

Myrsinaceae

'Anagallis arvensis L., WP 077

Lysimachia radicans Hook., LBSM 33729; WRC 11354; LBSH 34654 (J)

Nartheciaceae

Aletris aurea Walter, LBSH 34715

Nyssaceae

Nyssa aquatica L., SEWP 380; LB 35037

Nyssa biflora Walter, SEWP 325; LBJL 33998

Nyssa sylvatica Marsh., SEWP 324; LBJL 34038

Oleaceae

Chionanthus virginicus L., SJ 13713; LB 35012

Forestiera acuminata (Michx.) Poir., LBSH 34081; SJ 13711

Fraxinus americana L., LBSH 34177

Fraxinus caroliniana Mill., SJ 14336; LBSM 33758; LB 35024, 35166

Fraxinus pennsylvanica Marsh., SJ 14620

*Ligustrum sinense Lour., SEWP 205

Onagraceae

Gaura longiflora Spach, GW 2983; LBJL 34011

Ludwigia alternifolia L., LBSM 33734; SJ 14461

Ludwigia decurrens Walter, MM 8013; SJ 14464; LB 35032

Ludwigia glandulosa Walter, LBSM 33748; LBSH 34718: SEWP 224; LB 35153

Ludwigia linearis Walter, MM 8026

Ludwigia octovalvis (Jacq.) P.H. Raven, SJ 14352; LBSH 34098

Ludwigia palustris (L.) Elliott, WP 145

Ludwigia pilosa Walter, SEWP 322; LBJL 34019, 34979

Oenothera biennis L., LBRH 33895

Oenothera laciniata Hill, WP 107

Oenothera speciosa Nutt., LB 34560

Onocleaceae

Onoclea sensibilis L.var. sensibilis, LB 34208

Ophioglossaceae

Botrychium biternatum (Savogny) Underwood, GW 835

Orchidaceae

Hexalectris spicata (Walter) Barnhart, LB 19219 (SBSC); GW 3472,3483

Listeria australis Lindl., GW 919

Spiranthes laciniata (Small) Ames, SJ 14152

Spiranthes odorata (Nutt.) Lindl., SEWP 391; LBSH 34170

Spiranthes praecox (Walter) S. Watson, LB 34525

Orobanchaceae

Epifagus virginiana (L.) Bart., WP 130

Agalinis heterophylla (Nutt.) Small ex Britton, SEWP 225

Agalinis purpurea (L.) Penn., SEWP 281; LBSH 34198; LB 35099

Aureolaria flava (L.) Farwell, LBSH 33829

Osmundaceae

Osmunda cinnamomea L., LBJL 34020

Osmunda regalis L. var. spectabilis (Willd.) A. Gray, WP 110; LBSH 34945

Oxalidaceae

+Oxalis dillenii Jacq., SJ 14226

+*Oxalis debilis Kunth (DC.) Lourteig, WP 129

Oxalis violacea L., Brown 35187

Passifloraceae

Passiflora incarnata L., LB 34974, 35183

Passiflora lutea L., LBSM 33776; SJ 14328; LBRH 34627

Penthoraceae

Penthorum sedoides L., SJ 14401, LBSH 34956

Phrymaceae

Mimulus alatus Aiton, LBSH 34952

Phyllanthaceae

Phyllanthus caroliniensis Walter, LBSM 33755 *Phyllanthus urinaria L., MM 8020

Phytolaccaceae

Phytolacca americana L., LBSM 33750

Pinaceae

Pinus echinata Mill., SEWP 194 *Pinus elliottii Engelm., LBSH 34088 Pinus palustris Mill., LB 34226 Pinus taeda L., MM 8029; LBSM 33745

Plantaginaceae

Bacopa monnieri (L.) Penn., GW 2938; LBJL 34013 Gratiola brevifolia Raf., LB 34564; LBSH 34940 Mecardonia acuminata (Walter) Small, MM 7972; SEWP 283 Mecardonia procumbens (Mill.) Small, WP 085 Micranthemum umbrosum (J.F. Gmel.) S.F. Blake, SJ 14326 Nuttallanthus canadensis (L.) D.A. Sutton, LB 34290 Nuttallanthus texanus (Scheele) D.A. Sutton, WP 128; GW 3331, 3332

*Plantago major L., LB 34266 Plantago virginica L., LBSH 34417; LB 34554 Veronica peregrina L. var. peregrina, LB 34305 Scoparia dulcis L., MM 8039; SEWP 440

Platanaceae

Platanus occidentalis L., LBSM 33778

Poaceae

Agrostis hyemalis (Walter) Britton, Sterns & Poggenb., LB 34613

Agrostis perennans (Walter) Tuck., LB 34214

Andropogon glomeratus (Walter) Britton, Sterns, & Poggenb., SEWP 448, 458, 367

Andropogon ternarius Michx., SEWP 453; LBSH 34178; LB 35074

Andropogon virginicus L., LBSH 34087

Anthenantia texana R. Kral, LBRH 34057a

Anthenantia villosa (Michx.) P. Beauv., SEWP 293; LBRH 34057b; LB 34225

Aristida lanosa Muhl. ex Elliott, LBSH 34077

Aristida longespica Poir. var. geniculata (Raf.) Fernald, LBRH 34056; LB 35155

Aristida longespica Poir. var. longespica, LBSH 34075

Aristida purpurascens Poir. var. purpurascens, SJ 14492; LBSH 34084; LB 35156

Aristida purpurascens Poir, var. virgata (Trin.) Allred, LBSH 34194

Arundinaria gigantea (Walter) Muhl., LB 34656 (J); PR s.n. (T); LB 35081

Axonopus compressus (Sw.) Beauv., LBSH 34933.

Axonopus fissifolius (Raddi) Kuhlm., LBSM 33738; LBSH 34401 (J); LB 35001

Axonopus furcatus (Flüggé) Hitchc., LBSH 34168

*Bothriochloa bladhii (Retz.) S.T. Blake, LB 35094

*Bothriochloa ischaemum (L.) Keng var. songarica (Fish. & Mey) Celarier & Harlan, SEWP 452

*Briza minor L., LBSH 34414; LB 34538

*Bromus catharticus Vahl, LB 34583

Cenchrus spinifex Cav., GW 2943

Chasmanthium latifolium (Michx.) H.O. Yates, LBSH 34657 (J)

Chasmanthium laxum (L.) H.O. Yates, SEWP 187

Chasmanthium sessiliflorum (Poir.) H.O. Yates, SJ 14309, 14521

*Cynodon dactylon (L.) Person, SEWP 457

*Dactyloctenium aegyptium (L.) P. Beauv., LB 35095

Dichanthelium aciculare (Desv. ex Poir.) Gould & C.A. Clark var. aciculare, LBRH 33903, LBSH 34930

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. acuminatum, SJ 14128; LBSH 34416; LB 34612, 34617

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. densiflorum (E.L. Rand & Redfield) Gould & C.A. Clark, LB 34260; LBSH 34953

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. lindheimeri (Nash) Gould & C.A. Clark, LB 34587a; LBRH 34638; LBSH 34709

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. longiligulatum (Nash) Gould & C.A. Clark, LBSM 33726; LBSH 34655 (J)

Dichanthelium boscii (Poir.) Gould & C.A. Clark, SJ 14402, 14301; LBRH 34050; LB 34990

Dichanthelium commutatum (Schult.) Gould, SJ 14308; LBSM 33724; LB 34259, 34522

Dichanthelium dichotomum (L.) Gould subsp. dichotomum, LBSH 34647 (J), 34719

Dichanthelium dichotomum (L.) Gould subsp. nitidum (Lam.) Freckman & Lelong, LB 35014

Dichanthelium ensifolium (Baldwin ex Elliott) Gould subsp. ensifolium, LBSH 34939

Dichanthelium laxiflorum (Lam.) Gould, LBSM 33742

Dichanthelium oligosanthes (Schult.) Gould var. oligosanthes, LBRH 33904; LBSH 34415, LB 34603

Dichanthelium oligosanthes (Schult.) Gould var. scribnerianum (Nash) Gould, LB 34526; LBSH 34726

Dichanthelium ovale (Elliott) Gould subsp. villosissimum (Nash) Freckmann & Lelong, LB 34598; LBSH 34724

Dichanthelium polyanthes Mohlenb., SJ 14223

Dichanthelium scoparium (Lam.) Gould, LB 34607

Dichanthelium sphaerocarpon (Elliott) Gould, LBSH 34399 (J); LB 34592

Dichanthelium tenue (Muhl.) Freckman & Lelong, LBSH 33823; LB 34555, 34598a

Dichanthium annulatum (Forsk.) Stapf, LB 35185

Digitaria bicornis (Lam.) Roem. & Schult., LBSH 34099; LB 35160

Digitaria ciliaris (Retz.) Koel., LBSM 33739, 34948; LBRH 34055; LBSH 34961

*Digitaria ischaemum (Schreb.) Muhl., LBSM 33739a; LBSH 34103a; LB 34239, 35020

Digitaria villosa Walter, LBRH 34063; LBSH 34085

*Digitaria violascens Link, LBSH 34176

*Echinochloa colonum (L.) Link, SJ 14493

*Echinochloa crus-galli (L.) Beauv., GW 3035

Echinochloa walteri (Pursh) Heller, SJ 14439; LBSH 34074; LB 351135

*Eleusine indica (L.) Gaertn., SJ 14489; LBSH 34094

Elymus virginicus L., LB 34584

Eragrostis elliottii S. Watson, LB 35108

Eragrostis hypnoides (Lam.) Britton, Sterns & Poggenb. SJ14446; LBSH 34972

*Eragrostis japonica (Thunb.) Trin., SJ 14462, 14458; LBSH 34103, 34867

Eragrostis refracta (Muhl.) Scribn., LBSH 34197, 34971; LB 34223

Eragrostis secundiflora J. Presl subsp. oxylepis (Torr.) S.D. Koch, SJ 14465; LBSH 34076

Eragrostis spectabilis (Pursh) Steud., LBSH 34105, 34175; LB 35015

*Eremochloa ophiuroides (Munro) Hack., SEWP 466; 5J 14364; LB 35064

Eustachys petraea (Sw.) Desv., SEWP 451

+Glyceria striata (Lam.) Hitchc., LB 34544

Gymnopogon ambiguus (Michx.) Britton, Sterns, & Poggenb., SEWP 287

Leersia lenticularis Michx., SEWP 386; LB 35082

Leersia virginica Willd., LB 34206

*Lolium perenne L., LB 34537

Muhlenbergia capillaris (Lam.) Trin., LB 35067

Muhlenbergia schreberi J.G. Gmel., LB 35186

Oplismenus hirtellus (L.) P. Beauv. subsp setarius (Lam.) Mez ex Ekman, SJ 14435; LB 35017

Panicum anceps Michx., LBSH 33819; SJ 14133, 14347

Panicum brachyanthum Steud., SEWP 288

Panicum dichotomiflorum Michx., SJ 14291; LBSH 34161

Panicum gymnocarpon Elliott, SJ 14354; LB 35080

Panicum rigidulum Bosc. ex Nees, SJ 14346, 14324; LB 35086

Panicum verrucosum Muhl., LBRH 34062; LBSH 34196

*Paspalum dilatatum Poir., LBSH 34721

Paspalum distichum L., LB 35093

Paspalum floridanum Michx., LBJL 34002

Paspalum laeve Michx., LBSH 34932

Paspalum langei (E. Fourn.) Nash, LB 34588, 35002; LBRH 34631

Paspalum lividum Trin., LBSH 34165

*Paspalum notatum Flüggé, LBSH 33822

Paspalum minus E. Fourn., LBSH 34182

Paspalum plicatulum Michx., GW 2944; LB 34542

Paspalum repens P.J. Bergius, LB 34987, 35087

Paspalum setaceum Michx., SJ 14520

*Paspalum urvillei Steud., LBSH 33818

Phalaris angusta Nees ex Trin, LB 34263

Polypogon monspeliensis (L.) Desf., LBSH 34666

*Phyllostachys aurea Riv., SJ 14437

Piptochaetium avenaceum (L.) Parodi, SJ 14207

*Poa annua L., LB 34255

Poa autumnalis Muhl. ex Elliott, LB 34280

Saccharum brevibarbe (Michx.) Pers. var. brevibarbe, EK 950

Saccharum baldwinii Spreng., SEWP 371; LB 35028

Saccharum giganteum (Walter) Pers., LBSH 34187

Sacciolepis striata (L.) Nash, SJ 14463

Schizachyrium scoparium (Michx.) Nash var. divergens (Hack.)

Gould, SEWP 292; GW 3208; LB 35066
"Sorghum halepense (L.) Pers., LB 34213

Sphenopholis longiflora (Vasey) Hitchc., LBSH 34404 (J); LB 34651(J)

Sphenopholis obtusata (Michx.) Scribn., LB 34524

Sporobolus compositus (Poir.) Merr. var. macer (Trin.) Kartesz & Gandhi, SEWP 447

Sporobolus clandestinus (Biehler) Hitchc., LB 35010, 35065, 35157

Sporobolus indicus (L.) R. Br., LBRH 33882

Sporobolus junceus (P. Beauv.) Kunth, SEWP 443; LBRH 34048

Sporobolus silveanus Swallen, SEWP 290

Sporobolus vaginiflorus (Torr. & A. Gray) A.W. Wood, LB 35092 Tridens flavus (L.) A. S. Hitchc. var. flavus, SJ 14499

Tridens strictus (Nutt.) Nash, SEWP 438; LBSH 34181

Triplasis purpurea (Walter) Chapm., SJ 14497; LBSH 34091 Urochloa platyphylla (Munro ex C. Wright) R.D. Webster, LB 34210

Vulpia sciurea (Nutt.) Henrard, LBSH 34418; LB 34614

Polygalaceae

Polygala incarnata L., SJ 14485
Polygala leptocaulis Torr. & A. Gray, SEWP 449
Polygala mariana Mill., SEWP 184
Polygala nana (Michx.) DC. SJ 14219, 14484
Polygala polygama L., SJ 14216
Polygala ramosa Elliott, SJ 14399

Polygonaceae

Brunnichia ovata (Walter) Shinners, WP 154; LBSH 34973 Eriogonum longifolium Nutt. var. longifolium, SJ 14501 Polygonum densiflorum Meisn., LB 35165 Polygonum hydropiperoides Michx., SJ 14315

*Polygonum lapathifolium L., LBSH 34101, 34966; LB 34309 Polygonum punctatum Elliott, SEWP 462; LBSH 34082; LB

*Rumex crispus L., LBRH 34626 Rumex hastatulus Baldw., GW 2940

Polypodiaceae

35110

Pleopeltis polypodioides (L.) E.B. Andrews & Windham var. michauxiana (Weath.) E.B. Andrews & Windham, LBSH 34171

Pontederiaceae

*Eichhornia crassipes (Mart.) Solms, PH 05016 (J)

Potamogetonaceae

Potamogeton pusillus L., SJ 14430

Primulaceae (see Myrsinaceae for Anagallis and Lysimachia and Theophrastaceae for Samolus)

Ranunculaceae

Anemone berlandieri Pritz., GW s.n.
Clematis crispa L., LBSH 34390 (J)
*Ranunculus muricatus L., LB 34254
Ranunculus pusillus Poir., LB 34301

Rhamnaceae

Berchemia scandens Trel., LBSH 34391 (J); LB 35009 Frangula caroliniana (Walter) A. Gray, LBSM 33769; WP 132

Rosaceae

Agrimonia microcarpa Wallr., GW 680; LBRH 33890

*Cotoneaster sp., LBSH 34652 (J)

Crataegus marshallii Eggl., SJ 13714

Crataegus opaca Hook. & Arn. ex Hook., SJ 13710; LBRH 34629

Crataegus viridis L., LB 34293

+Aronia arbutifolia (L.) Pers. SJ 14287

+*Potentilla indica (Andrews) T. Wolf, WP 109; LB 34262

Prunus caroliniana (Mill.) Aiton, SEWP 204; LB 35069

Prunus serotina Ehrh., SEWP 303; LB. 35189

Rubus argutus Link, WP 076

Rubus trivialis Michx., SEWP 450

Rubiaceae

Cephalanthus occidentalis L., SJ 14380

Diodia teres Walter, SJ 14213; LBSH 34946

Diodia virginiana L., LBSM 33732; SJ 14229

*Galium aparine L., LB 34265

Galium pilosum Aiton, SJ 14215

Galium tinctorium L., LB 34307; LBSH 34403 (J)

Galium uniflorum Michx., SEWP 198

Mitchella repens L., WP 124; LB 35151

Oldenlandia boscii (DC.) Chapm., LBRH 34054

Oldenlandia uniflora L., SEWP 381; LBSH 34096, 34941

*Richardia brasiliensis Gomes, SJ 14417

*Richardia scabra L., LBRH 33907; LB 35023

Rutaceae

Zanthoxylum clava-herculis L., LBSH 34950

Salicaceae

Salix nigra Nutt., WP 074

Salviniaceae

*Salvinia minima Baker, LBSH 34080; LB 35118

Sapindaceae

Acer barbatum Michx., SJ 14302; LB 34096 Acer rubrum L., LBSM 33731

Sapotaceae

Sideroxylon lanuginosum Michx. subsp. oblongifolium (Nutt.)
T.D. Pennington, WP 139; SJ 14333; LBSH 34083

Saururaceae

Saururus cernuus L., LBSH 3384, 34185

Scrophulariaceae (all of our taxa are in the following families: Orobanchaceae (*Agalinis* and *Aureolaria*); Linderniaceae (*Lindernia*); Phrymaceae (*Mimulus*); Plantaginaceae (*Bacopa, Gratiola, Mecardonia, Micranthemum, Nuttallanthus, Veronica,* and *Scoparia*)

Selaginellaceae

Selaginella apoda (L.) Spreng., PR s.n.

Smilacaceae

Smilax bona-nox L., LBSH 34407 (J), 34653 (J); LB 34984

Smilax glauca Walter, SEWP 217, 207; LBSH 34413

Smilax laurifolia L., LBJL 34005

Smilax pumila Walter, MM 8019; SEWP 278

Smilax rotundifolia L., SEWP 215

Smilax smallii Morong, SEWP 216; LB 34230, 34258; LBSH 34944

Smilax walteri Pursh, SJ 14561; LB 35025

Solanaceae

Physalis heterophylla Nees, LB 34228
Physalis pubescens L., SJ 14451; GW 2956; LBSH 34095
Solanum carolinense L., SJ 14201
Solanum ptycanthum Dun., SJ 14203; LB 35167

Sphenocleaceae

*Sphenoclea zeylandica Gaertn., LB 34983

Styraceae

Halesia diptera Ellis, LBSM 33723; SJ 14140, 14339 Styrax americana Lam., SJ 14382, 13715; LBSH 33843; LB 34284

Symplocaceae

Symplocos tinctoria (L.) L'Her., LBSM 33763; SJ 13712

Tetrachondraceae

Polypremum procumbens L., SEWP 461, 203; SJ 14197

Thelypteridaceae

Thelypteris kunthii (Desv.) Morton, MM 8032; SJ 14307; GW 829

Theophrastaceae

Samolus valerandi L. subsp. parviflorus (Raf.) Hultén, LBRH 34643

Tiliaceae (see Malvaceae for Tilia)

Typhaceae

Typha latifolia L., WP 162

Ulmaceae (see Cannabaceae for Celtis)

Planera aquatica (Walter) J. F. Gmel., WP 155

Ulmus alata Michx., SEWP 289

Ulmus americana L., SJ 14303

Urticaceae

Boehmeria cylindrica (L.) Sw., LBJL 34037

Valerianaceae

Valerianella radiata (L.) Dufr., WP 082; LB 34551, 34582

*Verbena ceae (see Lamiaceae for Callicarpa and Vitex)
*Glandularia pulchella (Sweet) Trons., SEWP 190
Phyla lanceolata (Michx.) Small, LB 35162
Phyla nodiflora (L.) Greene, GW 2934
*Verbena brasiliensis Vell., SJ 14202; GW 2932
Verbena halei Small, GW 2922; LB 34532
*Verbena rigida Spreng., LBJL 34012
Verbena scabra Vahl, GW 2959; LB 35164

Violaceae

Viola lanceolata L., LB 34291 Viola sororia Willd. var. missouriensis (Greene) McKinney, LB 34286

Viola sororia Willd. var. sororia, LB 34548 Viola palmata L., LB 34276

Vitaceae

Ampelopsis arborea (L.) Koehne, WP 143; LBRH 33908

Parthenocissus quinquefolia (L.) Planch., SJ 14304

Vitis aestivalis Michx., SEWP 211; LBRH 34636; LB 34616

Vitis cinerea (Engelm.) Engelm. ex Millardet var. cinerea, SJ 14460a, 14408

Vitis palmata Vahl, LBSM 33721; LBSH 34708 Vitis rotundifolia Michx., WP 134; LB 34523

Woodsiaceae

Athyrium filix-femina subsp. asplenioides (Michx.) Hultén, SEWP 442: LBJL 34039

Xyridaceae

Xyris ambigua Bey. ex Kunth, SJ 14394
Xyris difformis Chapm., var. difformis, LB 35026
Xyris jupicai L. Rich., GW 2961b; LBJL 34026
Xyris laxifolia Mart. var. iridifolia (Chapm) Karl, SEWP 459; GW 2961a, 2973; LBJL 33999

NOTES

Alternanthera sessilis. Brown and Marcus (1998) first reported this invasive species new to Texas from Liberty County and later it was found in Brazoria County (Brown et al. 2007). It is now known from Hardin County where it was collected on a sandy, drawn-down site along the Neches River.

Gonolobus suberosus var. **granulatus.** The genus *Gonolobus* is recognized as distinct from *Matelea* and *G.* suberosus has priority over *G. gonocarpus*. (Weakley 2007)

Bidens aristosa. We include Bidens polylepis under this taxon following Lipscomb and Smith (1977), Smith (1994), and Diggs et al. (1999).

Iva asperifolia var. **angustifolia**. Turner (2009) has combined our common sumpweed (*Iva angustifolia*) with a taxon known from Gulf Coastal Mexico.

Liatris squarrosa var. **squarrosa**. This variety was not mapped in Texas (Nesom 2006). It is distinguished by the pubescent stems and leaves in contrast to the glabrous stems and leaves of variety *glabra*.

Symphyotrichum divaricatum. We are following Nesom (2005) by using the specific rank and not Symphyotrichum subulatum var. ligulatum the varietal rank. See Nesom (2009) for further information.

Vernonia gigantea. Turner et al. (2003) mapped it only in Montgomery and Polk counties. Our Hardin County collection is apparently a new county record.

Lechea minor. First reported new to Texas from the Lance Rosier Unit (Brown et al. 2007). Only one non-flowering plant was noted in that Unit. In the Jack Gore Baygall and Neches Bottom Units, collections of vegetative and flowering plants are from a small population on an upland sandy soil under a telephone right of way on the north side of the entrance to the Jack Gore Baygall Unit along Timber Slough Road. Currently, Texas collections of this species are only from these two Big Thicket Units.

Scirpus divaricatus. Turner et al. (2003) and Diggs et al. (2006) mapped this sedge only in Hardin County. The first Texas collection was from the Jack Gore Baygall but no location details were provided (Nixon and Ward 1982). Collections made for this study were from two locations in the Jack Gore Baygall. One was collected in a small shallow woodland pool on the north side of Franklin Lake Road at 30°28.00'N; 94°08.4'W. Collections made there were LBSM 33766 and LB 34980. At this location, the plants were common in a ca 0.4 ha. site. The label data on GW 3495 was Zig Zag Road, however the road sign along Highway 2937 is Youngblood Road. The first author has observed this species in a woodland depression along this road but did not collect it. It is probable that the only Texas collections are from these two sites.

Desmodium fernaldii. Turner et al. (2003) and Jones et al. (1997) did not list for species for Texas. Our single collection, from an arid sandyland at the pipeline right of way along Timber Slough Road, best fits the description and key in Gleason and Cronquist (1991) who reported it in Texas.

Desmodium viridiflorum. We merge D. nuttallii with this species following Gleason and Cronquist (1991, page 296).

Galactia regularis. In most floras, this species is called *Galactia volubilis*. As currently understood *G. volubilis* does not occur in Texas. See Ward and Hall (2004).

Lackeya multiflora. This species, formerly named Dioclea multiflora, is not mapped in Hardin County

(Turner et al. 2003). This legume vine, bearing rather large leaflets, was common on sandy soil along the Neches River in Hardin County. Our three collections are from sites that we were able to access.

Aronia arbutifolia. When *Aronia* and *Photinia* are combined, *Aronia* has priority because it is older. (Weakley 2007).

Oxalis dillenii. See Nesom (2009a) regarding this name and a significant revision of the other caulescent Oxalis.

Oxalis debilis. See Nesom (2009b) regarding this name and a significant revision of the other acaulescent Oxalis.

Glyceria striata. Turner et al. (2003) mapped this common species of the more northern states largely in the Edwards Plateau with Lamar and Washington counties the only stations east of the Plateau. The Hardin County station is the most southern and eastern record for Texas. There was a small population along the Wagon Road Trail which is off of a pipeline right of way in the only portion of the Jack Gore Baygall Unit that contacts Highway 2937.

Potentilla indica. Formerly named *Duchesnea indica* (Andrews) Focke, molecular studies indicate it is better placed in *Potentilla* (Erickson et al. 1998).

Pseudognaphalium luteoalbum. The only record east of the Edwards Plateau for this invasive species was Liberty County (Brown et al. 2007). Our Hardin County collection, from a draw-down site along the Neches River, is the second record east of the Plateau.

DISCUSSION

There are 133 families and 379 genera for the 734 (645 native) species and 739 taxa (650 native) recorded for the Jack Gore Baygall and Neches Bottom Units. Seven families: Poaceae (114 taxa), Asteraceae (95 taxa), Cyperaceae (69 taxa), Fabaceae (52 taxa), Euphorbiaceae (21 taxa), Lamiaceae (15 taxa), and Fagaceae (13 taxa) account for 51% of all taxa collected. The genera with 10 or more taxa are Cyperus (21 taxa), Dichanthelium (19 taxa), Carex (17 taxa), Quercus (11 taxa), and Juncus (10 taxa). As are all floras, our list is incomplete but we believe that we have collected over 90 % of the taxa. Of the eight units inventoried so far, the following 28 taxa were found only in the Jack Gore and Neches Bottom units: Alternanthera philoxeroides, Torilis nodosa, Bidens laevis, Croptilon rigidifolium, Pseudognaphalium luteoalbum, Solidago stricta, Tetragonothera ludoviciana, Vernonia gigantea, Scirpus divaricatus, Impatiens capensis, Cucumis melo, Schoenoplectus californicus, Equisetum hyemale, Astragalus leptocarpus, Desmodium fernaldii, Desmodium lineatum, Limnobium spongia, Glinus radiatus, Hexalectris spicata, Spiranthes laciniata, Saccharum brevibarbe var. brevibarbe, Sporobolus vaginiflorus, Potamogeton pusillus, Eichhornia crassipes, Potamogeton pusillus, Anemone berlandieri, Richardia brasiliensis, and Vitex negundo var. intermedia.

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REFERENCES

Aronow, S. 1981. Notes on the geological units: Big Thicket National Preserve. Big Thicket National Preserve. Beaumont, TX.

Brown, L.E., B.R. MacRoberts, M.H. MacRoberts, P.A. Harcombe, W.W. Pruess, I.S. Elsik, and D. Johnson. 2005. Annotated checklist of the vascular flora of the Turkey Creek Unit of the Big Thicket National Preserve, Tyler and Hardin counties, Texas. Sida 21:1807–1827.